I. *A Paper of the Honourable* Robert Boyl's, *deposited with the Secretaries of the Royal Society,* Octob. 14. 1680. *and opened since his Death; being an Account of his making the* Phosphorus, *&c.*

Sept. 30. 1680. THere was taken a *considerable quantity* of *Man's Urine*, (because the Liquor yields but a small proportion of the desired *Quintessence*) and of this a good part at least, had been for a pretty while digested before it was used. Then this Liquor was distilled with a moderate Heat, till the *Spirituous* and *Saline* parts were drawn off; after which the *Superfluous* Moisture also was abstracted (or evaporated away) till the remaining Substance was brought to the consistence of a somewhat thick *Syrup*, or a thin *Extract*. This done, it was well incorporated with thrice its Weight of fine *White Sand*; and the Mixture being put into a strong Stone-*Retort*, to which a large *Receiver* (in good part fill'd with Water) was so joyn'd, that the Nose of the Retort did almost touch the Water: Then the two Vessels being carefully luted together, a naked Fire was gradually administred for Five or Six Hours, that all that was either *Phlegmatick* or *Volatile* might come over first. When this was done, the Fire was encreased, and at length for Five or or Six Hours made as strong and intense as the Furnace (which was not bad) was capable of giving: (which Violence of Fire is a Circumstance not to be omitted in this Operation.) By this means there came over good store of white Fumes, almost like those that appear in the Distillation of the Oyl of *Vitriol*; and when

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when thoſe Fumes were paſs'd, and the *Receiver* grew clear, they were after a while ſucceeded by another ſort that ſeem'd in the *Receiver* to give a faint blewiſh Light, almoſt like that of little burning Matches dipt in Sulphur. And laſt of all, the Fire being very vehement, there paſs'd over another Subſtance, that was judg'd more ponderous than the former, becauſe it fell through the Water to the bottom of the *Receiver*; whence being taken out, (and partly even whilſt it ſtay'd there, it) appeared by ſeveral Effects, and other *Phænomena*, to be ſuch a kind of Subſtance as we deſired and expected.

II. *Problema* Florentinnm, *de mira Templi Teſtudine Quadrabili. A Doctiſſimo Dno. Johanne Wallis, S. T. D. Solutum.*

LIbet hic ſubjungere, Problema quoddam (interventu Clariſſimi Viri *D. Guilielmi Bridgman*) ad me tranſmiſſum, de mira cujuſdam Templi Teſtudine Quadrabili, meamque ejuſdem Solutionem, cum ſubjuncto Scholio eam explicante.

D. *Guilielmi Bridgman* ad me Epiſtola, erat (Latine reddita) ad hunc ſenſum;

Reverendo Viro, D. Wallis *S. T. D. Geometriæ Profeſſori,* Oxonii.

Auguſti 30. 1692.

Incluſam chartulam (Reverende Vir) Florentia *mihi miſſam, ut ad te deferatur (de qua ſententiam tuam expetunt*